

Course Title: Complete HTML5, CSS, and JavaScript Programming for Beginners

Course Overview

This course is designed for beginners who want to learn the fundamentals of web development using HTML5, CSS, and JavaScript. By the end of this course, you will have a solid understanding of how to create interactive and visually appealing web pages.

Module 1: Introduction to HTML5

Lesson 1.1: What is HTML?

- **Objective**: Understand the purpose of HTML.

- **Content**:

- Definition of HTML (HyperText Markup Language)
- Structure of an HTML document

- **Code Example**:

```
```html
<!DOCTYPE html>
<html lang="en">
<head>
 <meta charset="UTF-8">
 <meta name="viewport" content="width=device-width, initial-scale=1.0">
 <title>My First HTML Page</title>
</head>
<body>
 <h1>Hello, World!</h1>
 <p>This is my first HTML page.</p>
</body>
</html>
```
```

Lesson 1.2: HTML Elements and Tags

- **Objective**: Learn about different HTML elements and their usage.

- **Content**:

- Common HTML tags: `<h1>`, `<p>`, `<a>`, ``, ``, ``, `<div>`, ``

- **Code Example**:

```
```html
<h2>My Favorite Fruits</h2>

 Apple
 Banana

```
```

```
</li>Cherry</li>
</ul>
'''
```

Lesson 1.3: Forms and Input Elements

- **Objective**: Create forms using HTML.
- **Content**:
 - Understanding ``<form>``, ``<input>``, ``<textarea>``, ``<button>``
- **Code Example**:

```
'''html
<form action="/submit" method="post">
  <label for="name">Name:</label>
  <input type="text" id="name" name="name" required>
  <button type="submit">Submit</button>
</form>
'''
```

Module 2: Introduction to CSS

Lesson 2.1: What is CSS?

- **Objective**: Understand the purpose of CSS.
- **Content**:
 - Definition of CSS (Cascading Style Sheets)
 - How CSS styles HTML elements
- **Code Example**:

```
'''html
<style>
  body {
    background-color: lightblue;
  }
  h1 {
    color: white;
    text-align: center;
  }
</style>
'''
```

Lesson 2.2: CSS Selectors and Properties

- **Objective**: Learn about different CSS selectors and properties.
- **Content**:

- Types of selectors: element, class, ID, and attribute selectors

- **Code Example**:

```
```html
<style>
 .highlight {
 background-color: yellow;
 }
 #main-title {
 font-size: 24px;
 }
</style>
```
```

Lesson 2.3: Box Model and Layout

- **Objective**: Understand the CSS box model and layout techniques.

- **Content**:

- Explanation of margin, border, padding, and content

- **Code Example**:

```
```html
<style>
 .box {
 width: 200px;
 height: 100px;
 margin: 20px;
 padding: 10px;
 border: 2px solid black;
 }
</style>
<div class="box">This is a box model example.</div>
```
```

Module 3: Introduction to JavaScript

Lesson 3.1: What is JavaScript?

- **Objective**: Understand the purpose of JavaScript.

- **Content**:

- Definition of JavaScript and its role in web development

- **Code Example**:

```
```html
<script>
```

```
 console.log("Hello, JavaScript!");
</script>
'''
```

### ### Lesson 3.2: Variables and Data Types

- **Objective**: Learn about variables and different data types in JavaScript.

- **Content**:

- Understanding `var`, `let`, and `const`
- Data types: string, number, boolean, array, object

- **Code Example**:

```
```javascript
let name = "John";
let age = 30;
let isStudent = true;
let fruits = ["apple", "banana", "cherry"];
'''
```

Lesson 3.3: Functions and Events

- **Objective**: Create functions and handle events in JavaScript.

- **Content**:

- Defining functions and using event listeners

- **Code Example**:

```
```html
<button id="myButton">Click Me!</button>
<script>
 document.getElementById("myButton").addEventListener("click", function() {
 alert("Button was clicked!");
 });
</script>
'''
```

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## ## Module 4: Bringing It All Together

### ### Lesson 4.1: Creating a Simple Web Page

- **Objective**: Combine HTML, CSS, and JavaScript to create a simple web page.

- **Content**:

- Structure of a complete web page

- **Code Example**:

```
```html
<!DOCTYPE html>
```

```
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>My Simple Web Page</title>
  <style>
    body { font-family: Arial, sans-serif; }
    h1 { color: blue; }
  </style>
</head>
<body>
  <h1>Welcome to My Web Page</h1>
  <p>This is a simple web page created with HTML, CSS, and JavaScript.</p>
  <button id="greetButton">Greet Me</button>
  <script>
    document.getElementById("greetButton").addEventListener("click", function() {
      alert("Hello, welcome to my web page!");
    });
  </script>
</body>
</html>
'''
```

Lesson 4.2: Best Practices and Resources

- **Objective**: Learn best practices for web development and additional resources.
- **Content**:
 - Code organization, comments, and accessibility
 - Recommended online resources for further learning

Lesson 4.3: Final Project

- **Objective**: Create a small project that incorporates all learned concepts.
- **Content**:
 - Guidelines for the project
 - Example project ideas (e.g., personal portfolio, simple blog)

Conclusion

By completing this course, you will have a foundational understanding of HTML5, CSS, and JavaScript. You will be equipped to create basic web pages and continue your journey into